Wireless Broadband Access Technology, Industry Structure, and Public Policy

William Lehr

Massachusetts Institute of Technology wlehr@mit.edu

Abstract:

The Internet created a mass market for data communication services; and cellular, a mass market for mobile communications services. With the development of wireless broadband Internet access, these worlds are finally converging. This has important implications for industry structure and competition, and hence, regulatory/public policy. An earlier paper (Lehr & McKnight, 2002) compared and contrasted two technical/business strategies for deploying wireless broadband services: 3G and WiFi. The former is exemplified by the traditional service provider model (i.e., vertically-integrated, network-centric, end-to-end service); while the latter can at least potentially support new business models (e.g., decentralized, edge/end-user centric, distributed services). For this reason, WiFi is viewed by many as a disruptive technology. This paper extends the earlier analysis in light of further market developments, and specifically, considers the implications of the emerging business models for spectrum management reform.